

# Blu100

Laser cutting  
and engraving  
system



*Technology this good has  
never been so affordable*



[WWW.LOTUSLASER.COM](http://WWW.LOTUSLASER.COM)

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## What is Blu100?

The combination of high power and large bed size makes Blu100 our most versatile laser cutter, well suited to the majority of sheet material cutting applications.

Acrylic is a perfect material for laser cutting. However, over recent years acrylic has become an expensive material. At 1000x600mm the working area of Blu100 is sized to minimise material waste. This is just one of the reasons why Blu100 is our best selling CO2 laser cutter.

Blu100 is powered by an 80w DC excited, water-cooled CO2 laser operating at the 10.6µm wavelength. This level of power is very good for most cutting applications but it's also good for power intensive engraving applications such as laser engraving wood



## Standard Features

### UK DESIGNED & MANUFACTURED

Most competing machines of this type and at this price point will be direct Chinese imports. All Lotus Laser Systems are designed, assembled and tested in the UK to ISO9001 quality standards. We design our own electronics and manufacture all of our wiring in house to ensure that our systems are built to the highest quality and can be relied upon to deliver years of trouble free service

### EXCELLENT CAD/CAM SOFTWARE

All Blu model laser cutters come with easy to use, feature enriched Lotus Cut CAD/CAM software. Unlike the alternative print driver type machines, using our software provides far greater compatibility with common industry artwork formats, extra functionality to alter drawings at the laser cutting machine without having to open an expensive graphics package and, best of all, powerful optimisation tools to minimise process times, reduce errors and enhance output quality



### ▲ UK GRADED DC LASER SOURCE

Some DC lasers have a reputation of being very unreliable, even when new. At Lotus Laser Systems we carefully select the suppliers and the technology that we use for DC lasers then in the UK we test all of the lasers that we receive before they are integrated, literally scrapping any that do not meet our high quality

standards. As a consequence this adds some time and cost to our process, however, we feel that this grading process is the main reason why DC lasers fitted to a Lotus Laser System often outperform and far outlast DC lasers from alternative providers.

## Standard Features

### AIR ASSISTED NOSECONE ▶

When users switch from other brands to ours one of the main comments made is that the lens in a Blu laser cutter requires far less frequency of cleaning and lasts a much longer time. This is primarily because of the extra large bore air assist tube that we use combined with a different sized nosecone for each of the lens options we provide. As a result, Blu lasers deliver far higher rates of air flow through the nosecone not only protecting the lens but in many cases, in combination with underside extraction our air assist also enhances the cut quality



### ◀ UNDERSIDE EXTRACTION

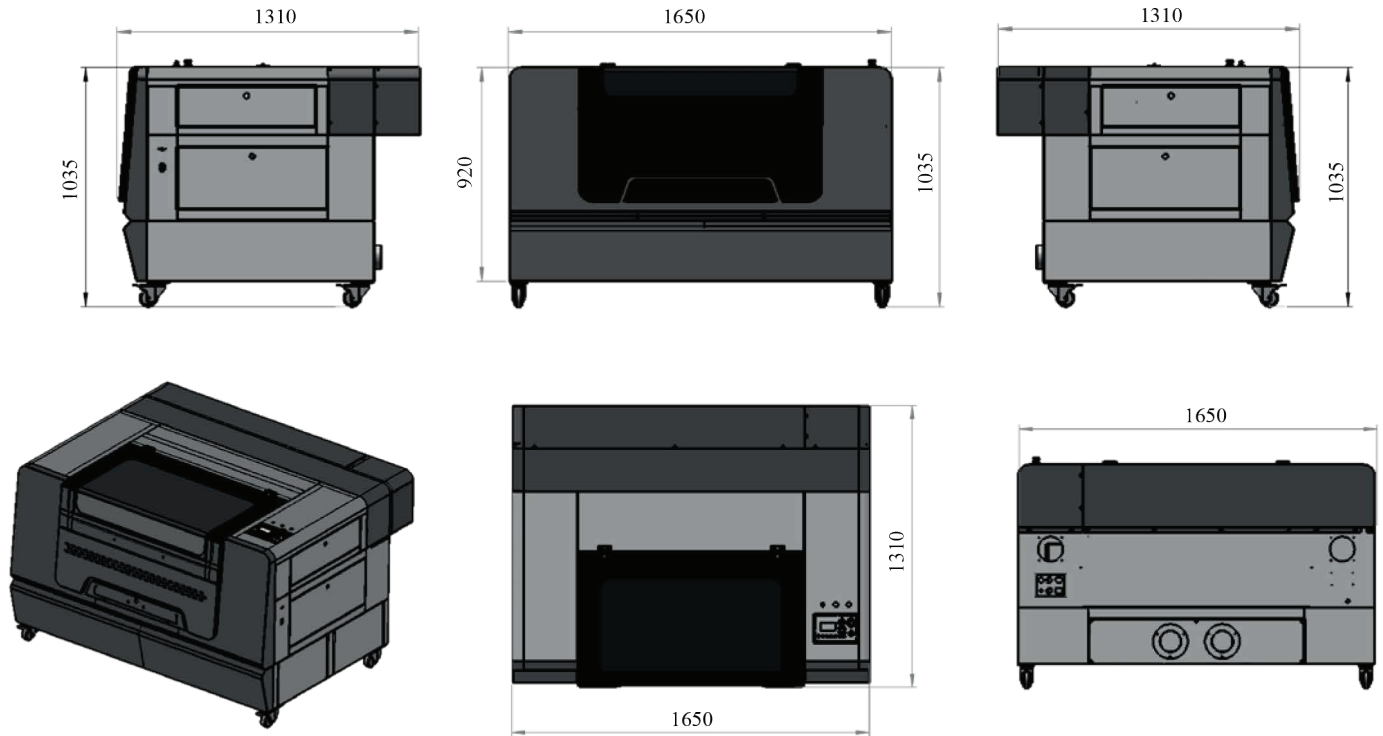
To maximise edge quality and speed of cutting, for most applications fumes should be extracted through the cut line from underneath the material. All Blu model laser cutters come with an underside extraction table designed to deliver a well balanced degree of vacuum and air flow. This underside extraction table can also be used to hold flat thin materials that might otherwise warp. Drawing fumes from underneath the material significantly reduces system maintenance, increasing component life while at the same time minimising the risk of flaming.

### LAMELLA BAR CUTTING TABLE ▶

All Blu model laser cutters are manufactured with a lamella bar cutting table. Cutting rigid sheet materials on lamella bars is far superior to using a honeycomb table. The lamellas can hold a far heavier weight, do not suffer distortion or cause as much flash back as a honeycomb table does; they can be removed, cleaned and very cheaply replaced if necessary.



## General Technical Data



### NET WEIGHT & DIMENSIONS

Width	1650mm
Depth	1310mm
Height	1035mm
Weight	292kg approx

### GROSS (CRATED) WEIGHT & DIMENSIONS

Width	1880mm
Depth	1630mm
Height	1350mm
Weight	440kg approx

### COOLING UNIT

Gross:	420mm W x 690mm D x 570mm H @ 25kg
Net:	280mm W x 580mm D x 430mm H @ 20kg

### LASER SOURCE

DC excited, water-cooled, minimum 80w output @ 10.6µm
Positioning (red dot) pointer 655mm

### POWER REQUIREMENT

All systems single phase	230v 50/60Hz
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### COMPUTER

Operating System	Windows
Connection	USB max 3m

### EXHAUST REQUIREMENTS

It is mandatory to operate a correctly configured exhaust	
Performance variable according to application - seek our advice	
Number of exhaust ports: 2	Port OD Diameter: 100mm

### PERFORMANCE

Scanning mode: 1000mm/sec	Vector mode: 50mm/sec
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### SAFETY & SECURITY

Laser class 2 interlocked	CE
Emergency stop	RoHS

Keyswitch power on/off

### MISCELLANEOUS

LED cabinet lights	Buffer with 99 file capacity
Controller with LCD display	PC Connections by 3m USB cable
Direct connection by USB stick	Coaxial air assist
Cutting nosecone (1 per lens)	Air assist pump

### TABLE CONFIGURATION

67x lamella bar cutting table	Lamellas at 15mm centres
Z axis max travel 100mm	Centralised underside exhaust

### MAXIMUM PART LOAD

X 1000mm	Y 600mm
Z 1.5" lens 165mm	Weight 20kg
Z 2.0" lens 140mm	Z 4.0" lens 90mm
Z 2.5" lens 125mm	

### ENVIRONMENTAL REQUIREMENTS

Ambient temp. within 15-30c	300mm min clearance at sides
Do not store above or box in	Rest on floor level within 3mm
Ventilate the room well	Comply with local regulations
Do not power by a generator	Direct data cable connection

Keep away from: vibration, high humidity, dampness, unstable power supply, direct sunlight, equipment making dust particles, drafts corrosive substances, combustible substances etc.

### WARRANTY (T&C APPLY)

Main system: 2 years	Labour: Variable by territory
Laser source: 1 year	Optics: 3 months
Warranty upgradable to 5 years at extra cost	
Service contracts available at extra cost	